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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,584	12/27/2004	Jun Fujii	1217-045998	9566
10/317,304	12/2//2004	Jun I ujn	12.7-043770	2500
Kent E Baldau	7590 07/25/200 <b>f</b>	7	EXAM	INER
700 Koppers Building			NGUYEN, HUY TRAM	
436 Seventh Avenue Pittsburgh, PA 15219-1818			ART UNIT .	PAPER NUMBER
Fittsburgh, FA	13219-1010		1709	
		•	MAIL DATE	DELIVERY MODE
			07/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Astion Comments	10/519,584	FUJII ET AL.				
Office Action Summary	Examiner	Art Unit				
	Huy-Tram Nguyen	1709				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timwill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	i.  lely filed  the mailing date of this communication.  O (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>27 December 2004</u> .						
2a) This action is <b>FINAL</b> . 2b) ⊠ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-6 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-6</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10)⊠ The drawing(s) filed on <u>27 December 2004</u> is/are: a)⊠ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list	of the certified copies not receive	d.				
Attachment(s)						
1) Notice of References Cited (PTO-892)  A) Interview Summary (PTO-413)  Paper No(s)/Mail Date						
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO/SB/08)</li> <li>Paper No(s)/Mail Date <u>September 22, 2005</u>.</li> </ul>	5) Notice of Informal Pa					

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#### **DETAILED ACTION**

## **Priority**

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by **Sung et al. (US Patent No. 6,087,298).** 

Regarding Claim 1, Sung et al. reference discloses an exhaust gas purifying catalyst-supported member (See Abstract – gas treatment catalytic article and Figure 1, numeral 10) comprising a metal carrier (See Column 25, Line 18-22 and Figure 1, numerals 18 and 20) and a catalyst layer directly formed on a surface of the metal carrier (See Column 24, Line 65-67), said catalyst layer comprising an exhaust gas purifying catalyst and silicon oxide (See Column 20, Line 21-36 – mixed oxide forms of silica-alumina – alumina oxide as an exhaust gas purifying catalyst and silicon oxide). The exhaust gas purifying catalyst-supported member of Sung et al. is structurally capable of performing the claimed intended use.

Regarding Claim 2, Sung et al. reference discloses the exhaust gas purifying catalyst-supported member as claimed in claim 1, wherein the weight ratio between the

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exhaust gas purifying catalyst and silicon oxide in the catalyst layer is in the range of 10:90 to 90:10 (See Column 20, Line 35 – up to 20 weight percent (20:80 ratio) of refractory oxide (Silicon oxide)).

Regarding Claim 3, Sung et al. reference discloses the exhaust gas purifying catalyst-supported member as claimed in claim 1, wherein the exhaust gas purifying catalyst in the catalyst layer comprises at least one noble metal selected from the group consisting of platinum, palladium and rhodium (See Column 20, Line 50-61 and Column 7, Line 5-7) and activated alumina (See Column 20, Line 30-35).

Regarding Claim 4, Sung et al. reference discloses the exhaust gas purifying catalyst-supported member as claimed in claim 1, wherein the metal carrier is a metal plate selected from the group consisting of a stainless steel plate, a stainless steel tube and a stainless steel corrugated plate (See Column 25, Line 20-22, Line 63-64).

Regarding Claim 5, Sung et al. reference discloses the exhaust gas purifying catalyst-supported member as claimed in claim 3, wherein the weight ratio between the noble metal and the activated alumina in the exhaust gas purifying catalyst layer is in the range of 1:1 to 1:35 (See Column 19, Line 63-Column 20, Line 7 –40 percent (1:1.5 ratio) of noble metal (palladium)).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

<sup>(</sup>a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Sung et** al. (US Patent No. 6,087,298) in view of Homeier et al. (US Patent No. 4,759,918).

Sung et al. reference discloses the claimed invention except for the exhaust gas purifying catalyst-supported member being a mesh filter brought into contact with an exhaust gas from a diesel engine. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the catalyst supported member as metal mesh filters for solving the diesel emission problem (See Homeier et al. – Column 1, Line 27-31).

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### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy-Tram Nguyen whose telephone number is 571-270-3167. The examiner can normally be reached on M - F: 7:30 AM - 5:00 PM (Alternated Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HTN 7/23/07 Watter D. GRIFFIN SUPERVISORY PATENT EXAMINER

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